



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO.                 | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---------------------------------|-------------|----------------------|---------------------|------------------|
| 09/630,955                      | 08/02/2000  | Bryan J. Donoghue    | 922-99              | 8131             |
| 7590 12/19/2003                 |             |                      |                     |                  |
| Nixon & Vanderhye P C           |             |                      |                     |                  |
| 1100 North Glebe Road 8th Floor |             |                      |                     |                  |
| Arlington, VA 22201-4714        |             |                      |                     |                  |
|                                 |             | EXAMINER             |                     |                  |
|                                 |             | SHAH, CHIRAG G       |                     |                  |
|                                 |             | ART UNIT             |                     |                  |
|                                 |             | PAPER NUMBER         |                     |                  |
|                                 |             | 2664                 |                     |                  |
|                                 |             | 3                    |                     |                  |

DATE MAILED: 12/19/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/630,955

Applicant(s)

DONOGHUE, BRYAN J.

Examiner

Chirag G Shah

Art Unit

2664

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 02 August 2000.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2 . 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-8 rejected under 35 U.S.C. 102(e) as being anticipated by Ramakrishnan (U.S. Patent No. 6,167,029).

Referring to claim 1, Ramakrishnan teaches in the abstract of a network communications controller that provides a fast detection of available buffer capacity and transmission of pause frames as needed to provide flow control. Ramakrishnan further discloses in column 3, lines 66 to column 4, lines 62 and figures 6-8 and respective portions of the specifications of providing flow control between first and second stations coupled in a full-duplexed manner, network device (network station) which includes means for receiving data packets over a (full-duplex) link, a memory (buffer) for the packets, Ramakrishnan discloses in figure 6 and respective portions of the specification, that the received buffer is associated with a level indicator (threshold) that is able to indicate the level of utilization of the storage capacity of the buffer, thus illustrating a means for providing an indication (which is achieved by a pause frame controller) that the occupancy of the memory is less than a first watermark (threshold), and

Art Unit: 2664

further provides in column 7, lines 40-63 and column 8, lines 47 to column 9, lines 17-39 means responsive to indication for providing a sequence of pause frames wherein said pause frames in the sequence define for a source of said packets alternating periods in which sending of packets on the link is alternately allowed and prevented as claim.

Referring to claim 6, Ramakrishnan teaches in the abstract of a network communications controller that provides a fast detection of available buffer capacity and transmission of pause frames as needed to provide flow control. Ramakrishnan further discloses in column 3, lines 66 to column 4, lines 62 and figures 6-8 and respective portions of the specifications of providing flow control between first and second stations coupled in a full-duplexed manner, network device (network station) which includes means for receiving data packets over a (full-duplex) link. Ramakrishnan discloses in figure 6 and respective portion of the specification of a network device which includes means for receiving data packets over a link, a memory for the packets, means for providing an indication that the occupancy of the memory is less than a first watermark (threshold), and further provides in column 7, lines 40-63 and column 8, lines 47 to column 9, lines 17-39 means responsive to said indication for providing a sequence of pause frames comprising an alternating sequence of XOFF frames defining a very long cessation of the sending of packets and XON frames defining substantially zero cessation of the sending of packets wherein said means for providing said pause frames is responsive to the increase of the occupancy of the memory above a selected watermark to cease the provision of said sequence of pause frames as claim.

Referring to claim 2, Ramakrishnan discloses in claims 17-19 and in addition to column 7, lines 40-63 and column 8, lines 47 to column 9, lines 17-39 and in figure 8 of a network

Art Unit: 2664

device according to claim 1 wherein said pause frames consist of an alternating sequence of XOFF frames defining a very long cessation of the sending of packets and XON frames defining substantially zero cessation of the sending of packets as claims.

Referring to claim 3, Ramakrishnan discloses in claims 17-19 and in addition to column 7, lines 40-63 and column 8, lines 47 to column 9, lines 17-39 and in figure 8 and respective portion of the specification that when the amount of data stored in the receiving buffer reaches the AE level, the MAC control produces and issues a pause frame to a sending station to inform the sending station that data transmission should be resumed (a pause time of zero) thus illustrating means for providing said pause frames is responsive to the increase of the occupancy of the memory above a selected watermark to cease the provision of said sequence of pause frames as claim.

Referring to claim 4 and 7, Ramakrishnan discloses in figure 6 and in column 7, lines 40-63 that a network device according to claim 3 wherein the aforementioned, first and selected watermarks are the same as claim.

Referring to claims 5 and 8, Ramakrishnan discloses in column 7, lines 40-63 that when the amount of data stored in the receiving buffer reaches the AF level, then the MAC control produces and issues a pause frame to a sending station to inform to the sending station that data transmission should temporarily be stopped, thus illustrating the means for providing pause frames is responsive to an indication that the occupancy of the memory is above a second watermark (AF) to send at least one pause frame prescribing cessation of the sending of packets on the link by the source device as claim.

Art Unit: 2664

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

**Or faxed to:**

(703)305-3988, (for formal communications intended for entry)

**Or:**

(703)305-3988 (for informal or draft communications, please label "Proposed" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2021 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chirag G Shah whose telephone number is 703-305-5639. The examiner can normally be reached on M-F 8:30 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on 703-305-4366. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

cgs

  
**Ajit Patel**  
Primary Examiner